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Figure 1

```
Bc28.2  MKGFFGIILSIIFVRAVSCTEDENRDSVVEGATSVEASLKEQIDWLAERY SADLTNKDTS 60
Bc28.1  MKGFFGIILSIIFVRAVSCTEDEKRDSVVEGATSVEASLKEQIDWLAERY SADLTNKDTS 60
          *****
          ↑

Bc28.2  KWNTTEQVKELLNEKAVGIESRLLAIAKEFHKLKSVLCTGVNETPAHVANRVSPGDAISM 120
Bc28.1  KWNTDEKVKELLNEKAVGIESRLLAIAKEFHKLKSVLCTGVNETPAHVANRVSPGDAISM 120
          ****;*:*****

Bc28.2  LYVLPNTHRELSSLKNKIDEWKKVKASDNGTNVIKNIKDDRTNTWFEVAGFKVAELNDVT 180
Bc28.1  LYVLSITHRELSSLKNKIDEWKKVKASEDGTKVIQNIKDDRTNTWFEVAGFKVAELNDVT 180
          ****. *****:***:*:*****

Bc28.2  LEKLATVVKLVSHKDMKYINKVMKKYFDRQKKE-AERLTCKAEKGMSGGKYKVKGY--A 237
Bc28.1  LEKLATVVNELVSHKDMIYINDAMKQNVDKWTKEESERLAMMAEQGISGAKGKKDGFSA 240
          *****:***** ***.***: .*: .** :***: **:*.*** * * .*: *
          ↑

Bc28.2  APSTWML----- 244
Bc28.1  GLSVISLLVA AVVV 256
          . * . *
```

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Figure 2

```

A8      MKGFFGIILSIIFVRAVSCTEDEKRDSVVEGATSVEASLKEQIDWLAERY SADLTNKDTS 60
BcB     MKGFFGIILSIIFVRAVSCTEDEKRDSVVEGATSVEASLKEQIDWLAERY SADLTNKDTS 60
34.01   MKGFFGIILSIIFVRAVSCTEDEKRDTVVEGATSVEASLKEQIDWLAERY SADLTNKDTS 60
BcA     MKGFFGIILSIIFVRAVSCTEDEKRDSVVEGATSVEASLKEQIDWLAERY SADLTNKDTS 60
Robin   MKGFFGIILSIIFVRAVSCTEDEKRDSVVEGATSVEASLKEQIDWLAERY SADLTNKDTS 60
Castres MKGFFGIILSIIFVRAVSCTEDEKRDSVVEGATSVEASLKEQIDWLAERY SADLTNKDTS 60
*****:*****

A8      KWNTDEKVKELLNEKAVGIESRLLAIAKEFHKLKSVLCTGVNETPAHVANRVSPGDAISM 120
BcB     KWNTDEQVKELLNEKAVGIESRLLAIAKEFHKLKSVLCTGVNETPAHVANRVSPGDAISM 120
34.01   KWNTNEQVKELLNEKAVGIESRLLAIAKEFHKLKSVLCTGVNETPAHVANRVSPGDAISM 120
BcA     KWNTDEKVKELLNEKAVGIESRLLAIAKEFHKLKSVLCTGVNETPAHVANRVSPGDAISM 120
Robin   KWNTDEKVKELLNEKAVGIESRLLAIAKEFHKLKSVLCTGVNETPAHVANRVSPGDAISM 120
Castres KWNTDEQVKELLNEKAVGIESRLLAIAKEFHKLKSVLCTGVNETPAHVANRVSPGDAISM 120
*****:*****

A8      LYVLSITHRELSSLKNKIDEWKKVKASEDGTKVIONIKDDRTNTWFWAHGFKVAELNDVT 180
BcB     LYVLSITHRELSSLKNKIDEWKKVKASDNGTNVIONIKDDRTNTWFWAHGFKVAELNDVT 180
34.01   LYVLSITHRELSSLKNKIDEWKKVKASDNGTNVIONIKDDRTNTWFWAHGFKVAELNDVT 180
BcA     LYVLSITHRELSSLKNKIDEWKKVKASEDGTKVIONIKDDRTNTWFWAHGFKVAELNDVT 180
Robin   LYVLSITHRELSSLKNKIDEWKKVKASEDGTKVIONIKDDRTNTWFWAHGFKVAELNDVT 180
Castres LYVLSITHRELSSLKNKIDEWKKVKASEDGTKVIONIKDDRTNTWFWAHGFKVAELNDVT 180
*****:*****

A8      LEKLATVVNELVSHKDMIYINDAMKQNVDKWTKEESERLAMMAEQGISGAKGKKGFSFA 240
BcB     LEKLATVVNELVSHNDMIYINDAMKQNVDKWTKEESERLAMMAEQGISGAKGKKGFSFA 240
34.01   LEKVATVVNELVSHNDMIYINDAMKQNVDKWNKE-SERLAMMAEQGISGAKGKKGFSFA 239
BcA     LEKLATVVNELVSHKDMIYINDAMKQNVDKWTKEESERLAMMAEQGISGAKGKKGFSFA 240
Robin   LEKLATVVNELVSHKDMIYINDAMKQNVDKWTKEESERLAMMAEQGISGAKGKKGFSFA 240
Castres LEKLATVVNELVSHNDMIYINDAMKQNVDKWNKE-SERLAMMAEQGISGAKGKKGFSFA 239
***:*****:*****

A8      GLSVISLLVA AVVV 256
BcB     GLSVISLLVA AVVVL 256
34.01   GLSVISLLVA AVVVL 255
BcA     GLSVISLLVA AVVV 256
Robin   GLSVISLLVA AVVV 256
Castres GLSVISLLVA AVVVL 255
*****:

```

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Figure 3

		<b>5'UTR</b>		<b>Met</b>	
Bc28.2	AGTCGATACCTCCGAGAATAGTCTTGTATTAAATCCTGTCGCTATTACAAATGAAGGGTTT				60
Bc28.1	AGTCGATACCTCCGAGAATAGTCTTGTATTAAATCCTGTCGCTATTACAAATGAAGGGTTT				60
	*****				
				<b>Fspe3</b>	
Bc28.2	CTTCGGAATTATTTTGTCTATTATTTTCGTTCCGTTAGCTGCACTGAGGATGAGAA				120
Bc28.1	CTTCGGAATTATTTTGTCCATTATTTTGTTCGTTCCGTTAGCTGCACTGAGGATGAGAA				120
	*****				
Bc28.2	CAGGGATAGTGTCTGTCGAGGGCGCTACGTCCGTTGAAGCCAGCTTAAAGGAGCAGATCGA				180
Bc28.1	AAGGGATAGTGTCTGTCGAGGGCGCTACGTCCGTTGAAGCCAGCTTAAAGGAGCAGATCGA				180
	*****				
Bc28.2	CTGGCTCGCTGAACGTTATTCCGCTGACTTGACTAACAAAGACACTTCAAAATGGAATAC				240
Bc28.1	CTGGCTCGCTGAACGTTATTCCGCTGACTTGACTAACAAAGACACTTCAAAATGGAATAC				240
	*****				
Bc28.2	CGAAGAGCAGGTGAAGGAGCTGTTAAATGAGAAGGCTGTTGGCATAGAGTCTCGCCTTCT				300
Bc28.1	CGACGAGAAGGTGAAGGAGCTGTTGAATGAGAAGGCTGTTGGCATAGAGTCTCGCCTTCT				300
	*** **				
Bc28.2	TGCCATTGCTAAGGAGTTCACAAATTGAAGTCCGTTCTGTGCACCGGTGTCAACGAAAC				360
Bc28.1	TGCCATTGCTAAGGAATTCCACAAATTGAAGTCCGTTCTGTGCACCGGTGTCAACGAAAC				360
	*****				
Bc28.2	TCCCGCTCATGTCGCTAACAGGGTGTCAACCGGAGACGCCATCTCCATGCTTTACGTGCT				420
Bc28.1	TCCCGCTCATGTCGCTAACAGGGTGTCAACCGGAGACGCCATCTCCATGCTTTACGTGCT				420
	*****				
				<b>pr 3</b>	
Bc28.2	TCCTAACACTCACAGGGAATTGTCTAGCCTTAAGAATAAGATCGATGAATGGAAGAAGGT				480
Bc28.1	TTCTATCACTCACAGGGAATTGTCTAGCCTTAAGAATAAGATCGATGAATGGAAGAAGGT				480
	* **				
Bc28.2	CAAGGCATCTGACAATGGCACCAATGTGATCAAAAATATCAAGGACGACAGGACTAACAC				540
Bc28.1	CAAGGCATCTGAAGATGGCACCAAGTGATCAAAAATATCAAGGACGACAGGACTAACAC				540
	*****				
				<b>Cons3.1</b>	
Bc28.2	CTGGTTCGTTGCCCATGGATTCAAGGTAGCTGAGCTCAACGATGTAACCCCTTGAGAACT				600
Bc28.1	CTGGTTCGTTGCCCATGGATTCAAGGTAGCTGAGCTCAACGATGTAACCCCTTGAGAACT				600
	*****				
Bc28.2	TGCAACAGTGTTAAAAAATTGGTGTCCACAAAGATATGAAATACATTAAACAAAGTTAT				660
Bc28.1	TGCAACAGTGTTAACGAATTGGTGTCCACAAAGATATGATTACATTAAACGACGCTAT				660
	*****				
Bc28.2	GAAAAAATATTTTGACAGGCAGAAAAAGGAGG---CTGAAAGATTGACCAAAAAGGCCGA				717
Bc28.1	GAAGCAAAACGTTGATAAATGGACCAAGGAGAGTCTGAAAGATTGGCCATGATGGCTGA				720
	*** **				
Bc28.2	GAAGGGTATGTCTGGAGGTAAGTATAAGGTGAAAGGTTATGCAGCCCCCTCTACTTGGAT				777
Bc28.1	ACAGGGTATATCTGGAGCCAAGGTAAGAAGGATGGATTCTATTTCGCCGT-CTTAG-T				778
	*****				

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**Rspe3G**

**Stop**

Bc28.2 GCTATGACCATGCATACAA-----GTTGCAACTAACAATTAAACATTTTGAAGCCTG-TAC 831

Bc28.1 GTCATCAGCCTTCTTGTGCGCCCGTCGCGGTTGTGGTC TAAGAGGTTAAGAATGACTAT 838

\*   \*   \*   \*   \*   \*   \*   \*   \*   \*   \*   \*   \*   \*   \*   \*

← **Rspe4**                      **Stop**                      ← **Rspe3C**

Bc28.2 TCCTCAATGAGCTC 845

Bc28.1 TTGTGGGCGTAATG 852

\*   \*   \*   \*

Figure 4

	5'UTR	Met	
A8	AGTCGATACCTCCGAGAATAGTCTTGTATTAATCCTGTCGCTATTACAAATGAAGGGTTT	60	
BcB	AGTCGATACCTCCGAGAATAGTCTTATATTAATCTTGCCGCTATTACAAATGAAGGGTTT	60	
34.01	AGTCGATACCTCCGAGAATAGTCTTATATTAATCTTGCCGCTATTACAAATGAAGGGTTT	60	
Castres	AGTCGATACCTCCGAGAATAGTCTTATATTAATCTTGCCGCTATTACAAATGAAGGGTTT	60	
Robin	AGTCGATACCTCCGAGAATAGTCTTGTATTAATCCTGTCGCTATTACAAATGAAGGGTTT	60	
BcA	AGTCGATACCTCCGAGAATAGTCTTGTATTAATCCTGTCGCTATTACAAATGAAGGGTTT	60	
	*****		
			Fspe3
A8	CTTCGGAATTATTTTGTCCATTATTTTGTTCGTGCCGTTAGCTGCACTGAGGATGAGAA	120	
BcB	CTTCGGAATTATTTTGTCCATTATTTTGTTCGTGCCGTTAGCTGCACTGAGGATGAGAA	120	
34.01	CTTCGGAATTATTTTGTCCATTATTTTGTTCGTGCCGTTAGCTGCACTGAGGATGAGAA	120	
Castres	CTTCGGAATTATTTTGTCCATTATTTTGTTCGTGCCGTTAGCTGCACTGAGGATGAGAA	120	
Robin	CTTCGGAATTATTTTGTCCATTATTTTGTTCGTGCCGTTAGCTGCACTGAGGATGAGAA	120	
BcA	CTTCGGAATTATTTTGTCCATTATTTTGTTCGTGCCGTTAGCTGCACTGAGGATGAGAA	120	
	*****		
A8	AAGGGATAGTGTCTGTCGAGGGCGCTACGTCCGTTGAAGCCAGCTTAAAGGAGCAGATCGA	180	
BcB	AAGGGATAGTGTCTGTCGAGGGCGCTACGTCCGTTGAAGCCAGCTTAAAGGAGCAGATCGA	180	
34.01	AAGGGATAGTGTCTGTCGAGGGCGCTACGTCCGTTGAAGCCAGCTTAAAGGAGCAGATCGA	180	
Castres	AAGGGATAGTGTCTGTCGAGGGCGCTACGTCCGTTGAAGCCAGCTTAAAGGAGCAGATCGA	180	
Robin	AAGGGATAGTGTCTGTCGAGGGCGCTACGTCCGTTGAAGCCAGCTTAAAGGAGCAGATCGA	180	
BcA	AAGGGATAGTGTCTGTCGAGGGCGCTACGTCCGTTGAAGCCAGCTTAAAGGAGCAGATCGA	180	
	*****		
A8	CTGGCTCGCTGAACGTTATTCCGCTGACTTGACTAACAAAGACACTTCAAATGGAATAC	240	
BcB	CTGGCTCGCTGAACGTTATTCCGCTGACTTGACTAACAAAGACACTTCAAATGGAATAC	240	
34.01	CTGGCTCGCTGAACGTTATTCCGCTGACTTGACTAACAAAGACACTTCAAATGGAATAC	240	
Castres	CTGGCTCGCTGAACGTTATTCCGCTGACTTGACTAACAAAGACACTTCAAATGGAATAC	240	
Robin	CTGGCTCGCTGAACGTTATTCCGCTGACTTGACTAACAAAGACACTTCAAATGGAATAC	240	
BcA	CTGGCTCGCTGAACGTTATTCCGCTGACTTGACTAACAAAGACACTTCAAATGGAATAC	240	
	*****		
A8	CGACGAGAAGGTGAAGGAGCTGTTGAATGAGAAGGCTGTTGGCATAGAGTCTCGCCTTCT	300	
BcB	CGACGAGCAGGTGAAGGAGCTGTTGAATGAGAAGGCTGTTGGCATAGAGTCTCGCCTTCT	300	
34.01	CAACGAGCAGGTGAAGGAACGTTGAATGAGAAGGCTGTTGGCATAGAGTCTCGCCTTCT	300	
Castres	CGACGAGCAGGTGAAGGAGCTGTTGAATGAGAAGGCTGTTGGCATAGAGTCTCGCCTTCT	300	
Robin	CGACGAGAAGGTGAAGGAGCTGTTGAATGAGAAGGCTGTTGGCATAGAGTCTCGCCTTCT	300	
BcA	CGACGAGAAGGTGAAGGAGCTGTTGAATGAGAAGGCTGTTGGCATAGAGTCTCGCCTTCT	300	
	* *****		
A8	TGCCATTGCTAAGGAATTCACAAATTGAAGTCCGTTCTGTGCACCGGCGTCAACGAAAC	360	
BcB	TGCCATTGCTAAGGAATTCACAAATTGAAGTCCGTTCTGTGCACCGGCGTCAACGAAAC	360	
34.01	TGCCATTGCTAAGGAGTTCCACAAATTGAAGTCCGTTCTGTGCACCGGCGTCAACGAAAC	360	
Castres	TGCCATTGCTAAGGAGTTCCACAAATTGAAGTCCGTTCTGTGCACCGGCGTCAACGAAAC	360	
Robin	TGCCATTGCTAAGGAATTCACAAATTGAAGTCCGTTCTGTGCACCGGCGTCAACGAAAC	360	
BcA	TGCCATTGCTAAGGAATTCACAAATTGAAGTCCGTTCTGTGCACCGGCGTCAACGAAAC	360	
	*****		
A8	TCCCCTCATGTCGCTAACAGGGTGTACCCGGAGACGCCATCTCCATGCTTACGTGCT	420	
BcB	TCCCCTCATGTCGCTAACAGGGTGTACCCGGAGACGCCATCTCCATGCTTACGTGCT	420	
34.01	TCCCCTCATGTCGCTAACAGGGTGTACCCGGAGACGCCATCTCCATGCTTACGTGCT	420	
Castres	TCCCCTCATGTCGCTAACAGGGTGTACCCGGAGACGCCATCTCCATGCTTACGTGCT	420	
Robin	TCCCCTCATGTCGCTAACAGGGTGTACCCGGAGACGCCATCTCCATGCTTACGTGCT	420	
BcA	TCCCCTCATGTCGCTAACAGGGTGTACCCGGAGACGCCATCTCCATGCTTACGTGCT	420	
	*****		

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A8 TTCTATCACTCACAGGGAATTGTCTAGCCTTAAGAATAAGATCGATGAATGGAAGAAGGT 480  
 BcB TTCTATCACTCACAGGGAATTGTCTAGCCTTAAGAATAAGATCGATGAATGGAAGAAGGT 480  
 34.01 TTCTATCACTCACAGGGAATTGTCTAGCCTTAAGAATAAGATCGATGAATGGAAGAAGGT 480  
 Castres TTCTATCACTCACAGGGAATTGTCTAGCCTTAAGAATAAGATCGATGAATGGAAGAAGGT 480  
 Robin TTCTATCACTCACAGGGAATTGTCTAGCCTTAAGAATAAGATCGATGAATGGAAGAAGGT 480  
 BcA TTCTATCACTCACAGGGAATTGTCTAGCCTTAAGAATAAGATCGATGAATGGAAGAAGGT 480  
 \*\*\*\*\*

A8 CAAGGCATCTGAAGATGGCACCAGTATCCAAAATATCAAGGACGACAGGACTAACAC 540  
 BcB CAAGGCATCTGACAAATGGCACCAGTATCCAAAATATCAAGGACGACAGGACTAACAC 540  
 34.01 CAAGGCATCTGACAAATGGCACCAGTATCCAAAATATCAAGGACGACAGGACTAACAC 540  
 Castres CAAGGCATCTGAAGATGGCACCAGTATCCAAAATATCAAGGACGACAGGACTAACAC 540  
 Robin CAAGGCATCTGAAGATGGCACCAGTATCCAAAATATCAAGGACGACAGGACTAACAC 540  
 BcA CAAGGCATCTGAAGATGGCACCAGTATCCAAAATATCAAGGACGACAGGACTAACAC 540  
 \*\*\*\*\*

## Cons3.1

A8 CTGGTTCGTTGCCCATGGATTCAAGGTAGCTGAGCTCAACGATGTACCCCTTGAGAACT 600  
 BcB CTGGTTCGTTGCCCATGGATTCAAGGTAGCTGAGCTCAACGATGTACCCCTTGAGAACT 600  
 34.01 CTGGTTCGTTGCCCATGGATTCAAGGTAGCTGAGCTCAACGATGTACCCCTTGAGAACT 600  
 Castres CTGGTTCGTTGCCCATGGATTCAAGGTAGCTGAGCTCAACGATGTACCCCTTGAGAACT 600  
 Robin CTGGTTCGTTGCCCATGGATTCAAGGTAGCTGAGCTCAACGATGTACCCCTTGAGAACT 600  
 BcA CTGGTTCGTTGCCCATGGATTCAAGGTAGCTGAGCTCAACGATGTACCCCTTGAGAACT 600  
 \*\*\*\*\*

A8 TGCAACAGTGGTTAACGAATTGGTGTCCACAAAGATATGATTTACATTAAACGACGCTAT 660  
 BcB TGCAACAGTGGTTAACGAATTGGTGTCCACAAATGATATGATCTACATTAAACGACGCTAT 660  
 34.01 TGCAACAGTGGTTAACGAATTGGTGTCCACAAATGATATGATCTACATTAAACGACGCTAT 660  
 Castres TGCAACAGTGGTTAACGAATTGGTGTCCACAAATGATATGATCTACATTAAACGACGCTAT 660  
 Robin TGCAACAGTGGTTAACGAATTGGTGTCCACAAAGATATGATTTACATTAAACGACGCTAT 660  
 BcA TGCAACAGTGGTTAACGAATTGGTGTCCACAAAGATATGATTTACATTAAACGACGCTAT 660  
 \*\*\*\*\*

A8 GAAGCAAAACGTTGATAAATGGACCAAGGAGGAGTCTGAAAGATTGGCCATGATGGCTGA 720  
 BcB GAAGCAAAACGTTGATAAATGGACCAAGGAGGAGTCTGAAAGATTGGCCATGATGGCTGA 720  
 34.01 GAAGCAAAACGTTGATAAATGGAACAAGGAG---TCTGAAAGATTGGCCATGATGGCTGA 717  
 Castres GAAGCAAAACGTTGATAAATGGAACAAGGAG---TCTGAAAGATTGGCCATGATGGCTGA 717  
 Robin GAAGCAAAACGTTGATAAATGGACCAAGGAGGAGTCTGAAAGATTGGCCATGATGGCTGA 720  
 BcA GAAGCAAAACGTTGATAAATGGACCAAGGAGGAGTCTGAAAGATTGGCCATGATGGCTGA 720  
 \*\*\*\*\*

A8 ACAGGGTATATCTGGAGCCAAGGGTAAGAAGGATGGATTCTCATTCCCGGTCTTAGTGT 780  
 BcB ACAGGGTATATCTGGAGCCAAGGGTAAGAAGGATGGATTCTCATTCCCGGTCTTAGTGT 780  
 34.01 ACAGGGTATATCTGGAGCCAAGGGTAAGAAGGATGGATTCTCATTCCCGGTCTTAGTGT 777  
 Castres ACAGGGTATATCTGGAGCCAAGGGTAAGAAGGATGGATTCTCATTCCCGGTCTTAGTGT 777  
 Robin ACAGGGTATATCTGGAGCCAAGGGTAAGAAGGATGGATTCTCATTCCCGGTCTTAGTGT 780  
 BcA ACAGGGTATATCTGGAGCCAAGGGTAAGAAGGATGGATTCTCATTCCCGGTCTTAGTGT 780  
 \*\*\*\*\*

Rspe4

Stop

Rspe3C

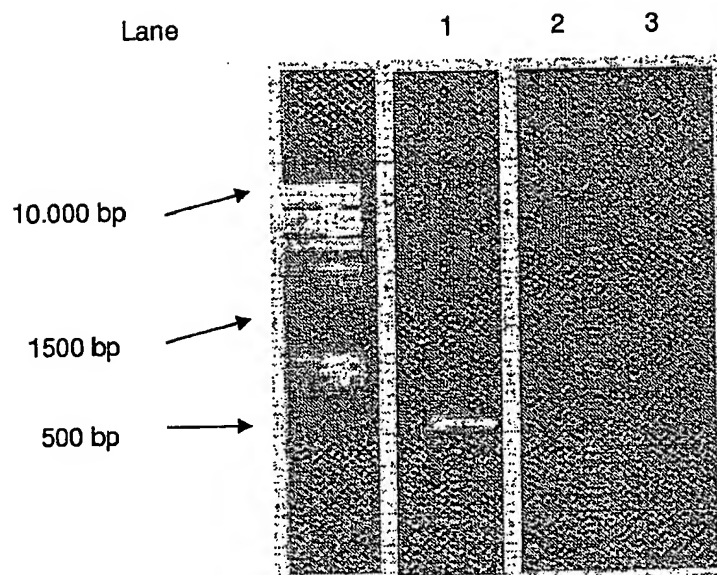
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 BcB CATCAGCCTTCTTGTGCGCCGTCGCGGTGTGGTCTAAGAGGTTAAGGATGACTATTT 840  
 34.01 CATCAGCCTTCTTGTGCGCCGTCGCGGTGTGGTCTAAGAGGTTAAGGATGACTATTT 837  
 Castres CATCAGCCTTCTTGTGCGCCGTCGCGGTGTGGTCTAAGAGGTTAAGGATGACTATTT 837  
 Robin CATCAGCCTTCTTGTGCGCCGTCGCGGTGTGGTCTAAGAGGTTAAGGATGACTATTT 840  
 BcA CATCAGCCTTCTTGTGCGCCGTCGCGGTGTGGTCTAAGAGGTTAAGGATGACTATTT 840  
 \*\*\*\*\*

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**Rspe3C**

A8	GTGGGCGTAATG	852
BcB	GTGGGCGTAATG	852
34.01	GTGGGCGTAATG	849
Castres	GTGGGCGTAATG	849
Robin	GTGGGCGTAATG	852
BcA	GTGGGCGTAATG	852
	*****	

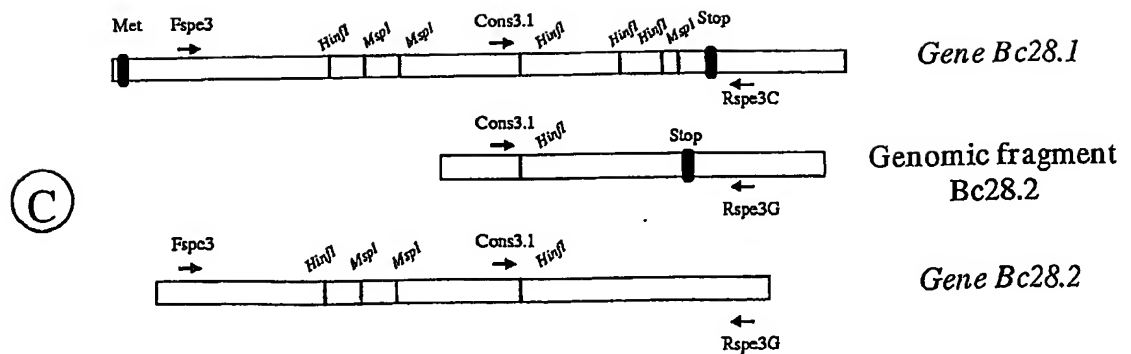
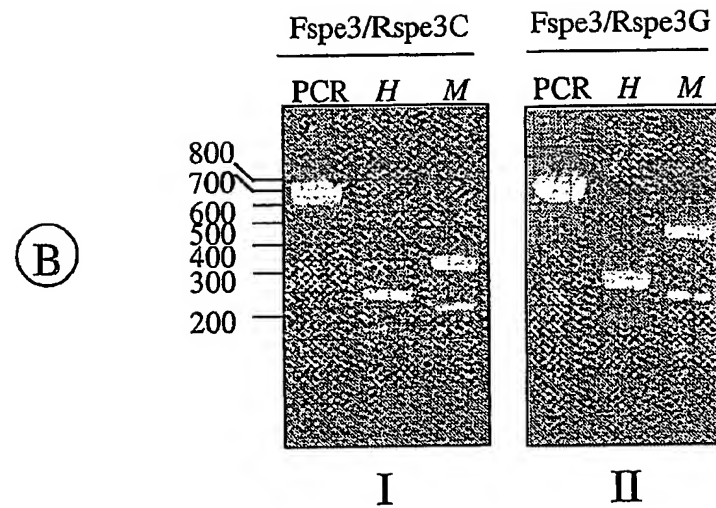
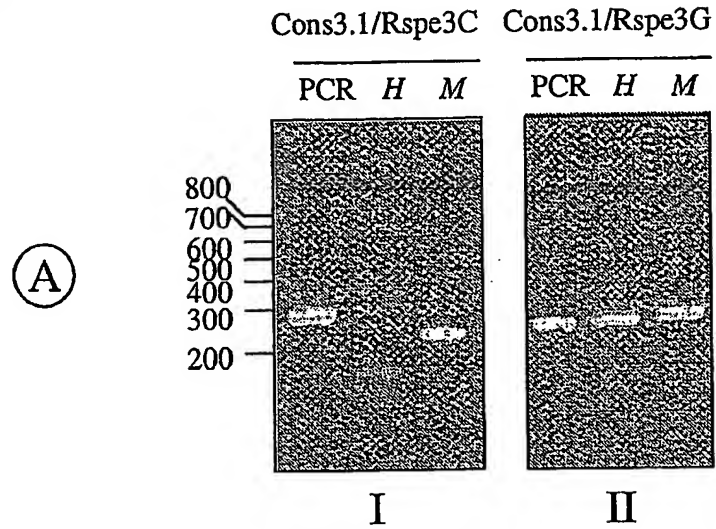
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**Figure 5**



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Figure 6



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Figure 7

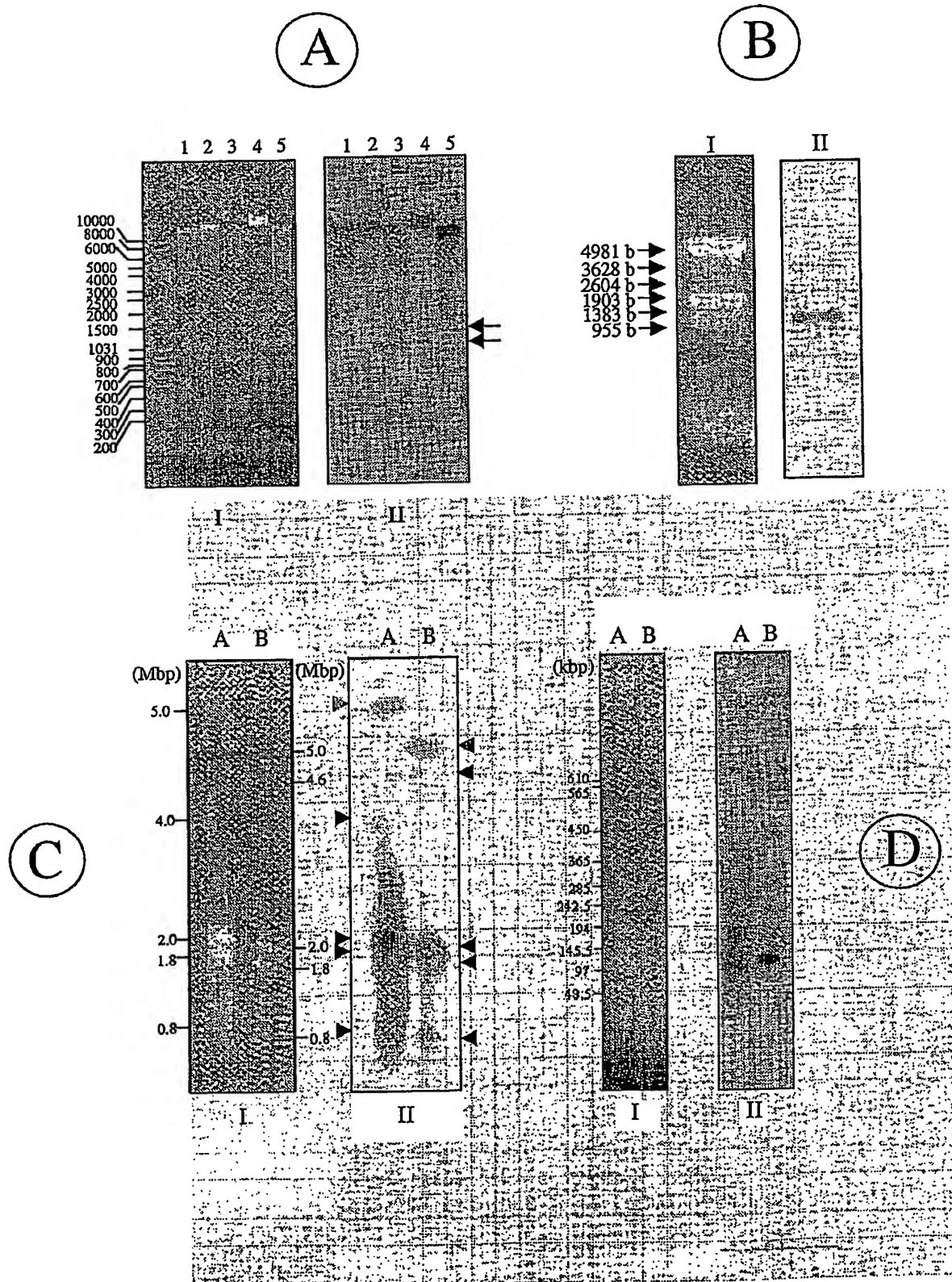
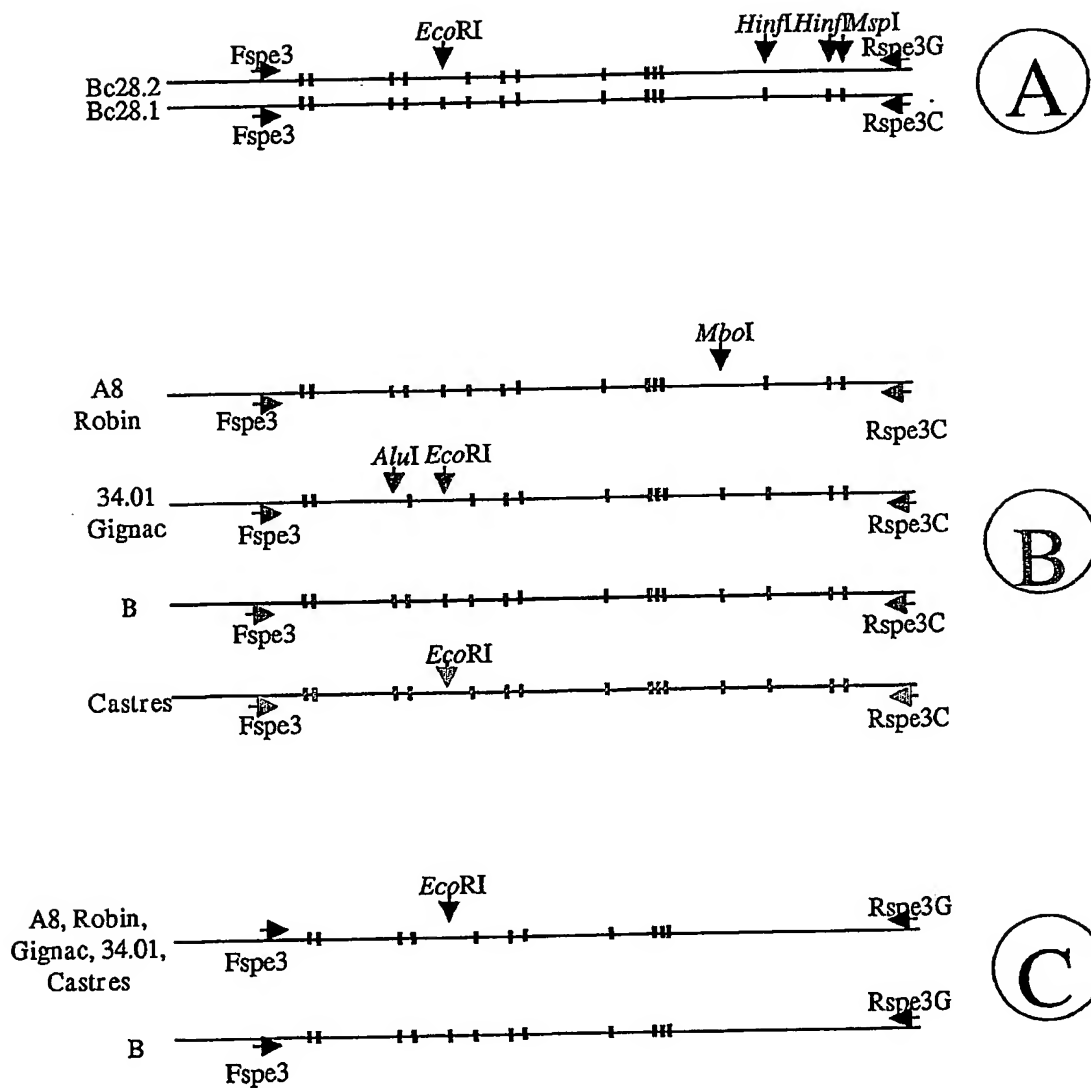
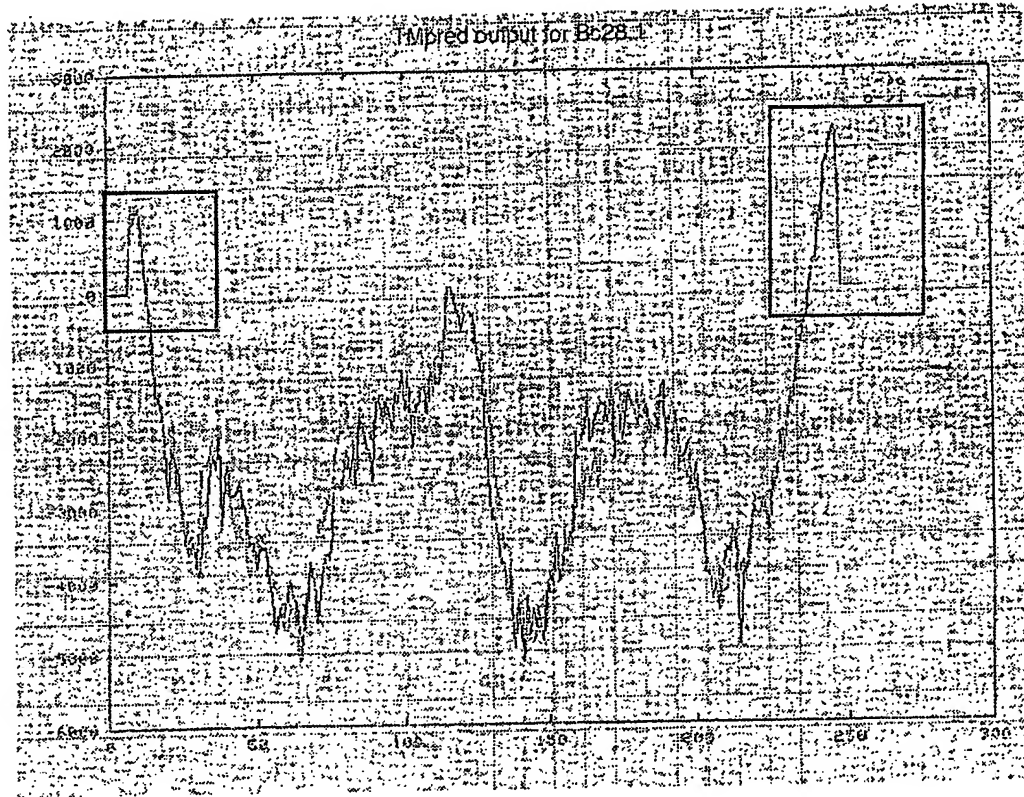


Figure 8



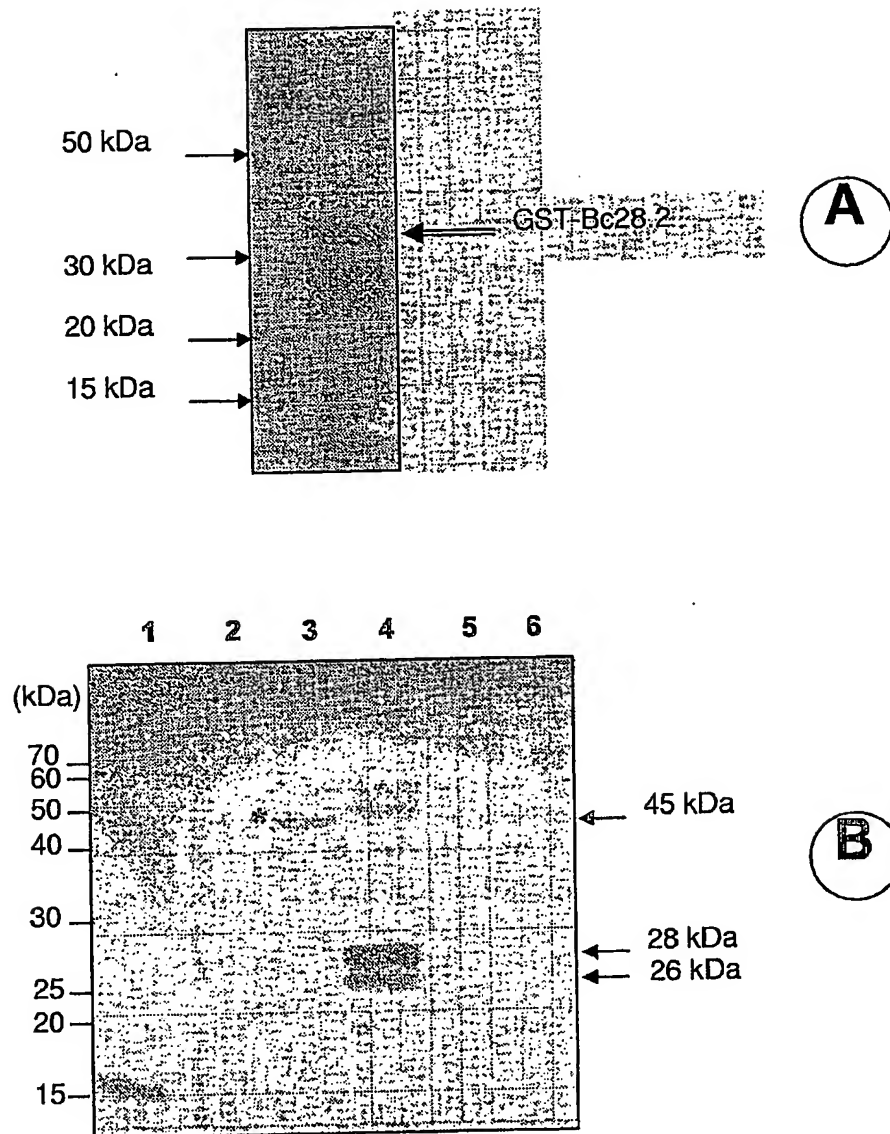
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Figure 9



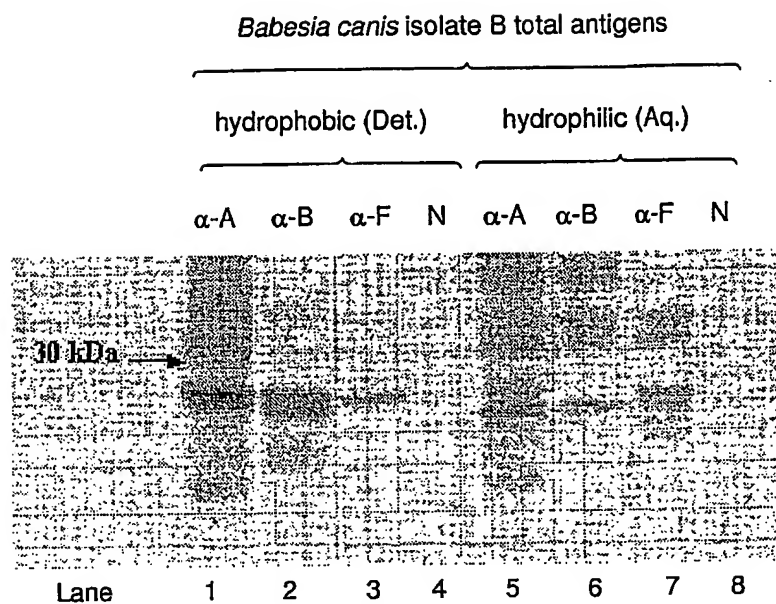
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**Figure 10**



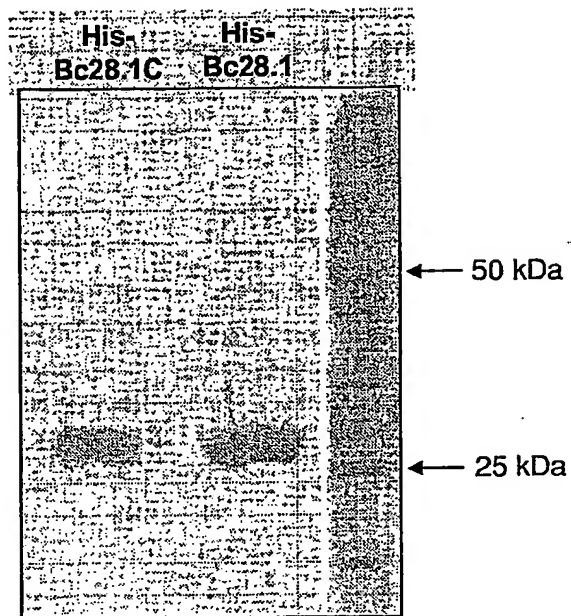
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Figure 11



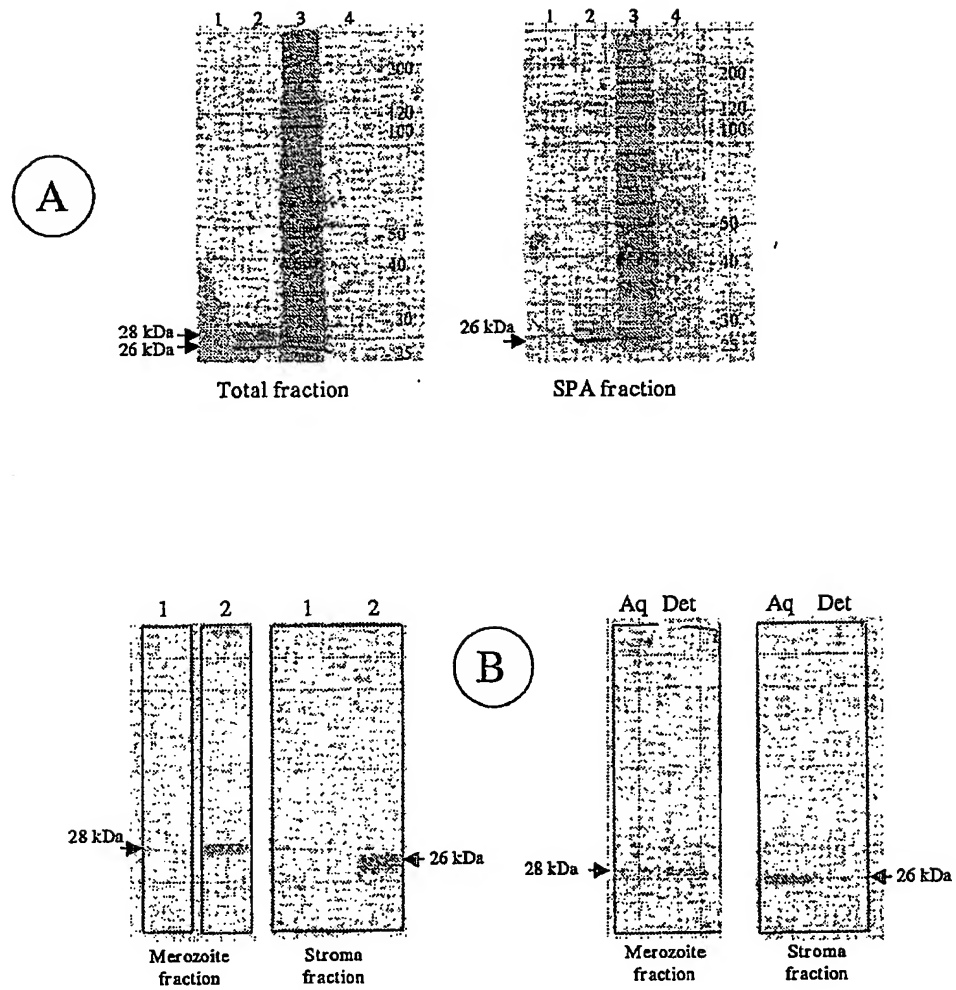
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Figure 12



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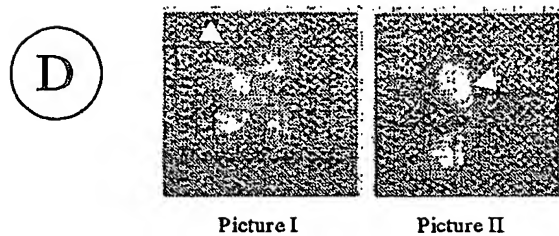
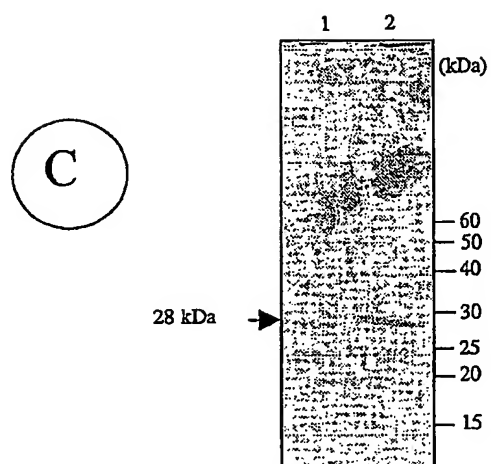
Figure 13





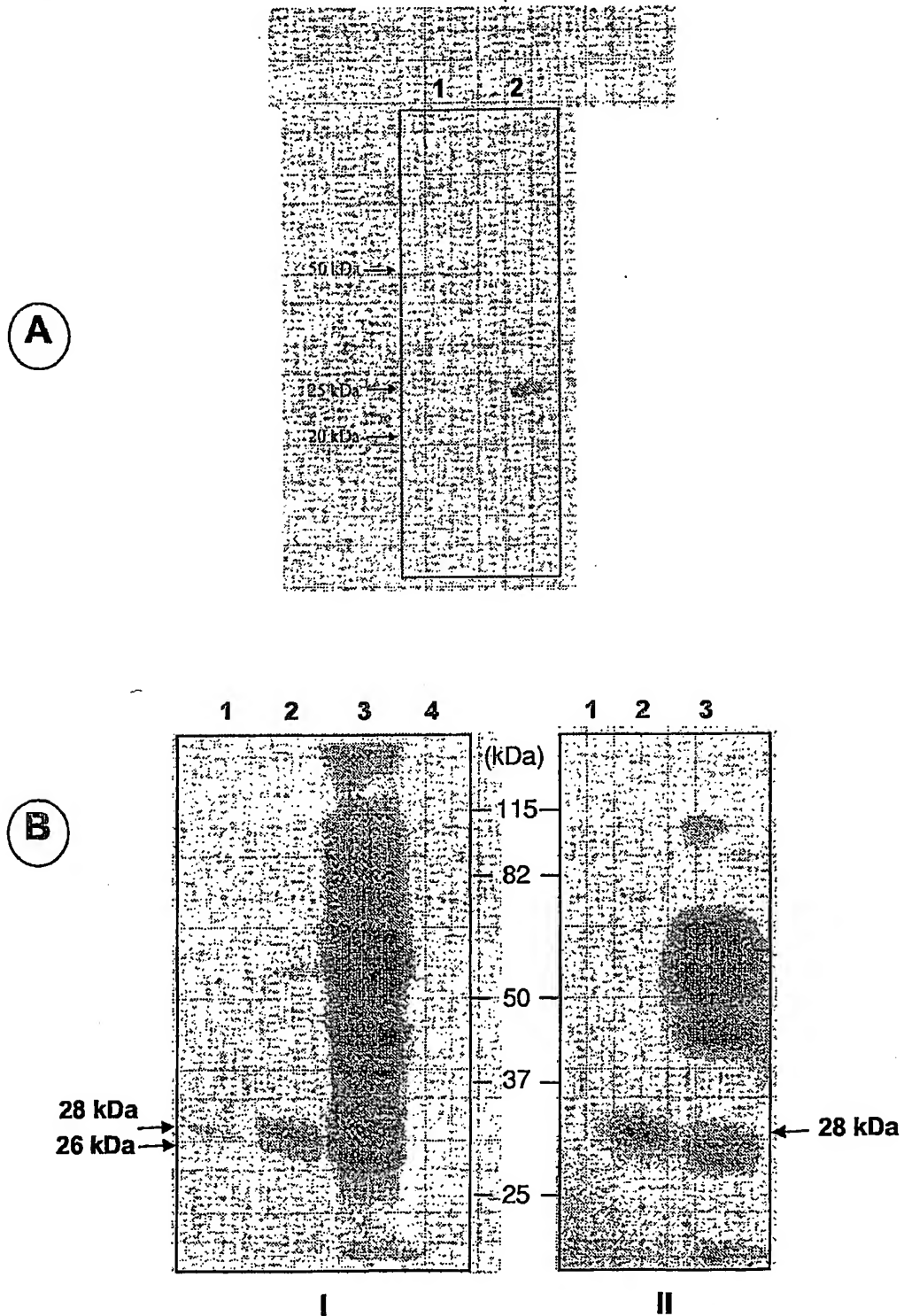
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Figure 13 (continued)



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**Figure 14**



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Figure 15

